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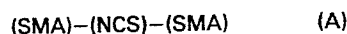
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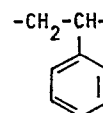
(54) Neocarzinostatin derivatives and method of producing the same.

(57) Neocarzinostatin derivatives, having anticancer activity,  
have the formula (A)

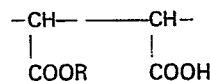


wherein (NCS) represents a divalent neocarzinostatin residue in which a hydrogen atom is removed from each of the primary amino groups of the alanine residue at the N-terminal of neocarzinostatin and of the primary amino group of the lysine residue at the 20th position from the N-terminal of neocarzinostatin and (SMA) represents a monovalent partially half-esterified styrene-maleic acid copolymer residue having a weight-average molecular weight of 800 to 2,500 and consisting of structural units of

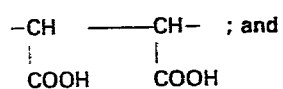
(a) the styrene residue



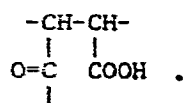
(b) the half-esterified maleic acid residue



wherein R is an alcohol residue wherein the hydroxyl group has been removed from an alkanol having 1 to 4 carbon atoms, ethylene glycol monoalkyl ether in which the alkyl group has 1 or 2 carbon atoms or glycerine dialkyl ether wherein the alkyl group has 1 or 2 carbon atoms;  
 (c) the maleic acid residue



(d) a residue having the following formula in which a hydroxyl group of one carboxyl group of a maleic acid residue has been removed to provide the link bonding the monovalent partially half-esterified styrene-maleic acid copolymer residue to the neocarzinostatin residue





European Patent  
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## EUROPEAN SEARCH REPORT

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Application number

EP 84 30 5413

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
X, P D	EP-A-0 087 957 (KURARAY CO. LTD.) * Claims 1, 10, 11 *	1, 5, 10	C 07 K 15/00 A 61 K 37/02 C 08 F 222/08
A, D	--- US-A-4 182 752 (H. MAEDA et al.) * Claims 1, 2 *	1, 10	
A	--- CHEMICAL ABSTRACTS, vol. 91, no. 20, 12th November 1979, Columbus, Ohio, USA; J. TAKESHITA et al. "A lipophilic derivative of neocarzinostatin. A polymer conjugation of an antitumor protein antibiotic", page 345, column 1, abstract no. 162995j & Int. J. Pept. Protein Res., vol. 14, no. 2, 1979, pages 81-87 -----	1, 5, 10	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
			A 61 K 37/02 C 07 K 15/00 C 08 F 8/32 C 08 F 222/08
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 13-08-1985	Examiner KNAACK M
<b>CATEGORY OF CITED DOCUMENTS</b>			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	